



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

May 10, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:18 Reporting for the week ending 05/04/13 (MMWR Week #18)

CURRENT HOMELAND SECURITY THREAT LEVELS

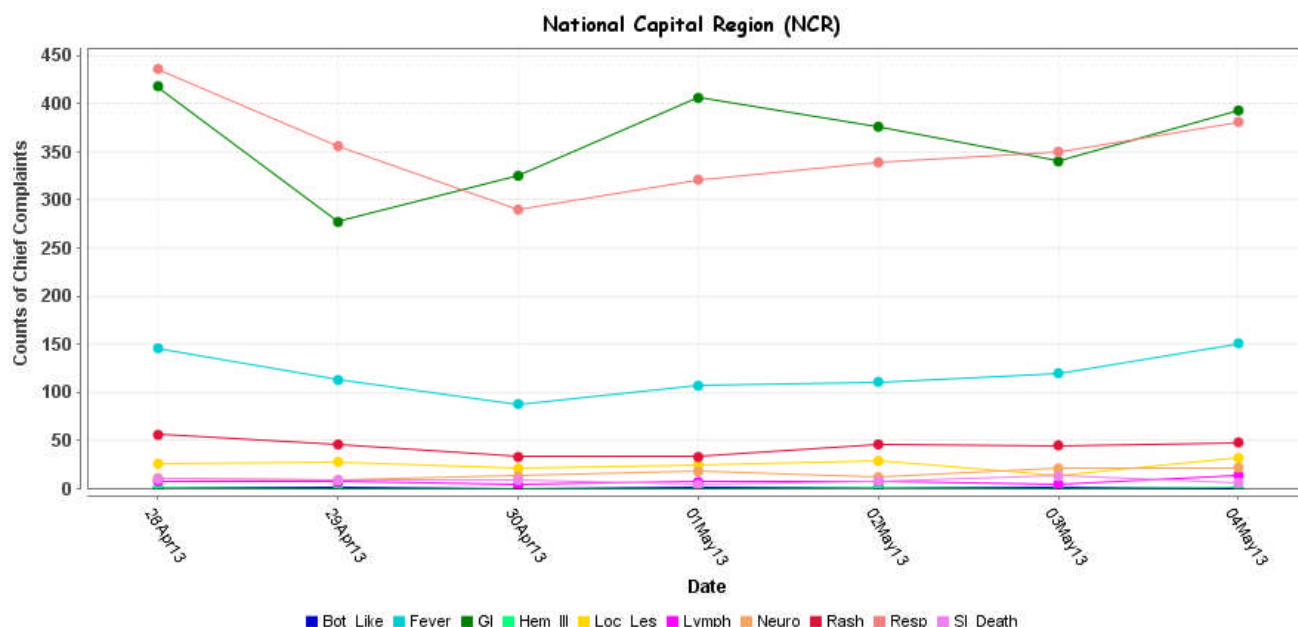
National: No Active Alerts
Maryland: Level One (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

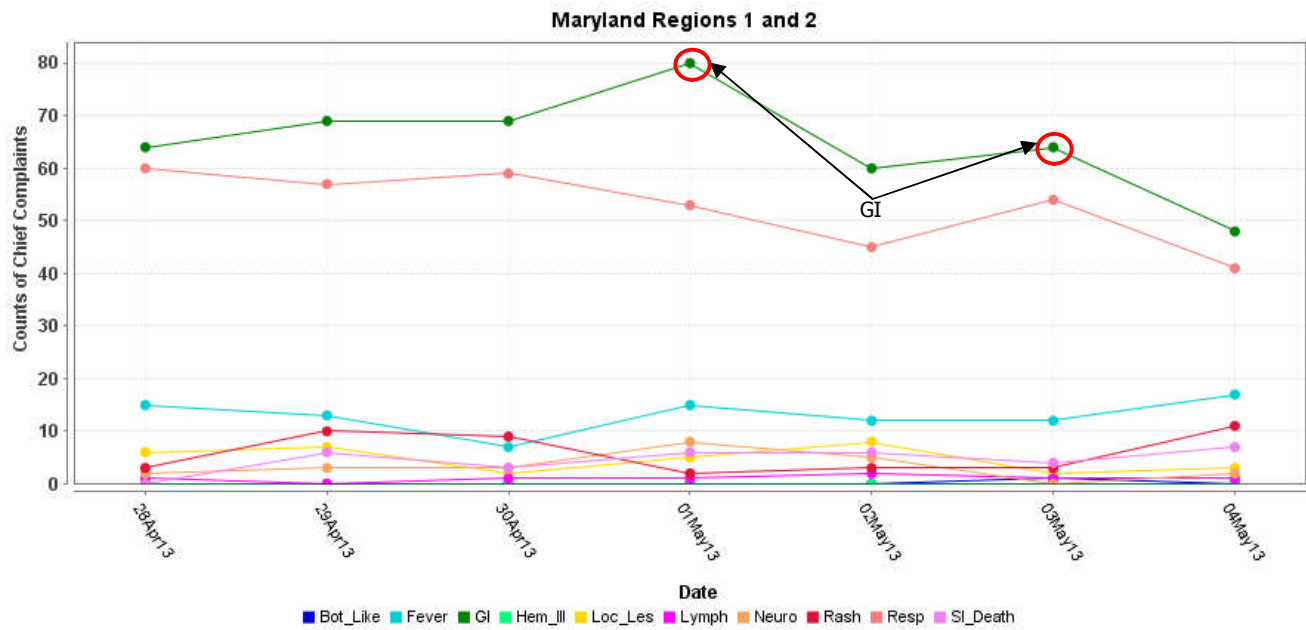
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

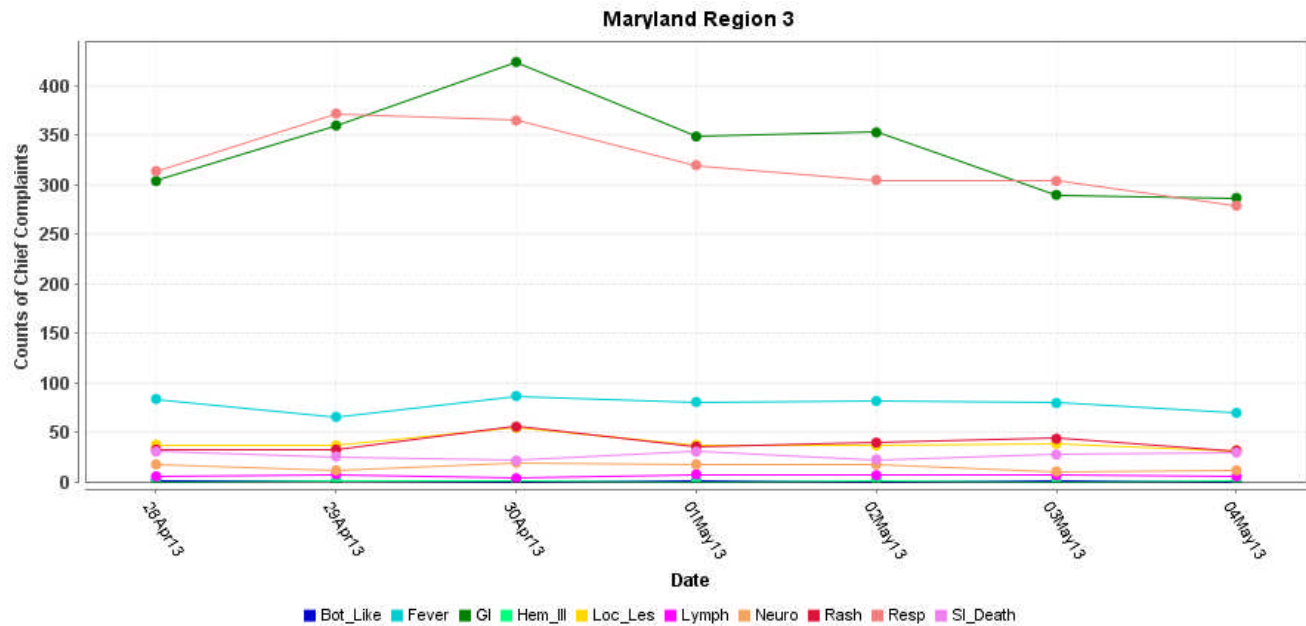


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

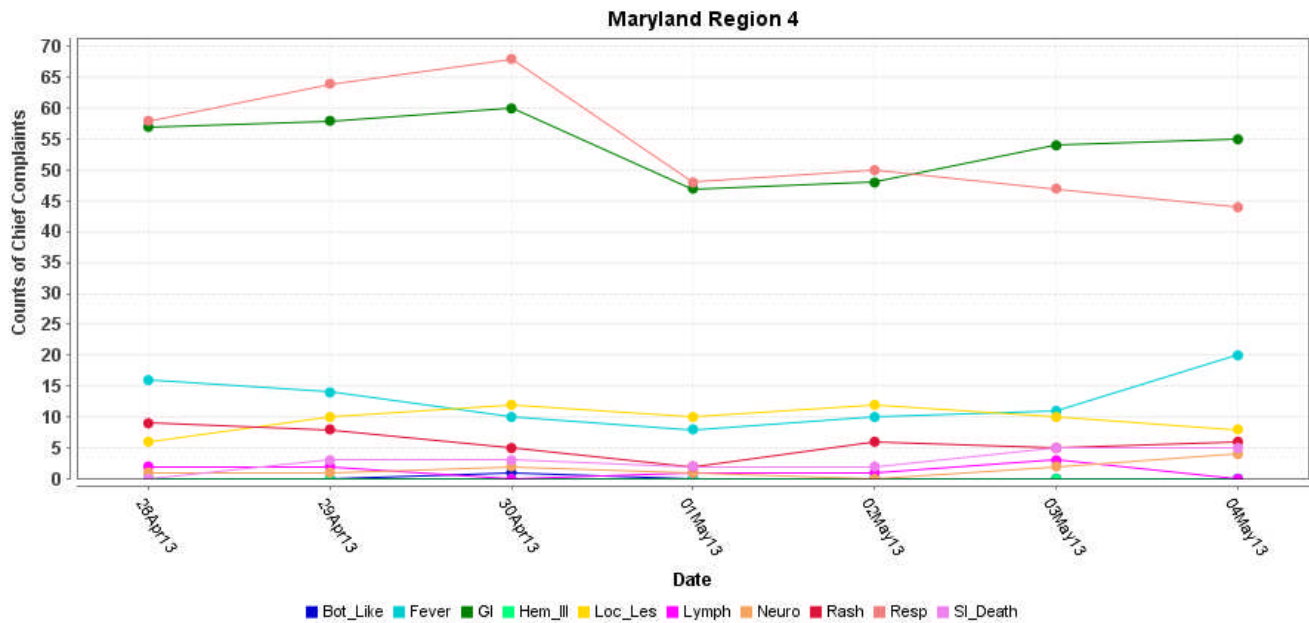
MARYLAND ESSENCE:



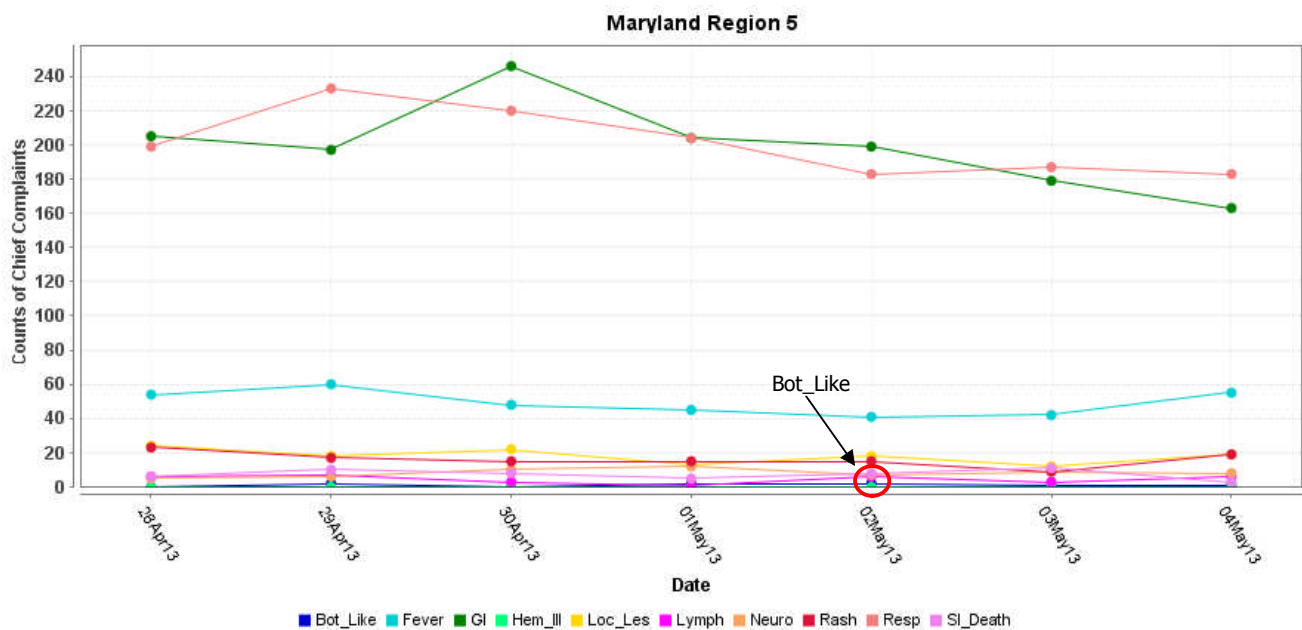
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

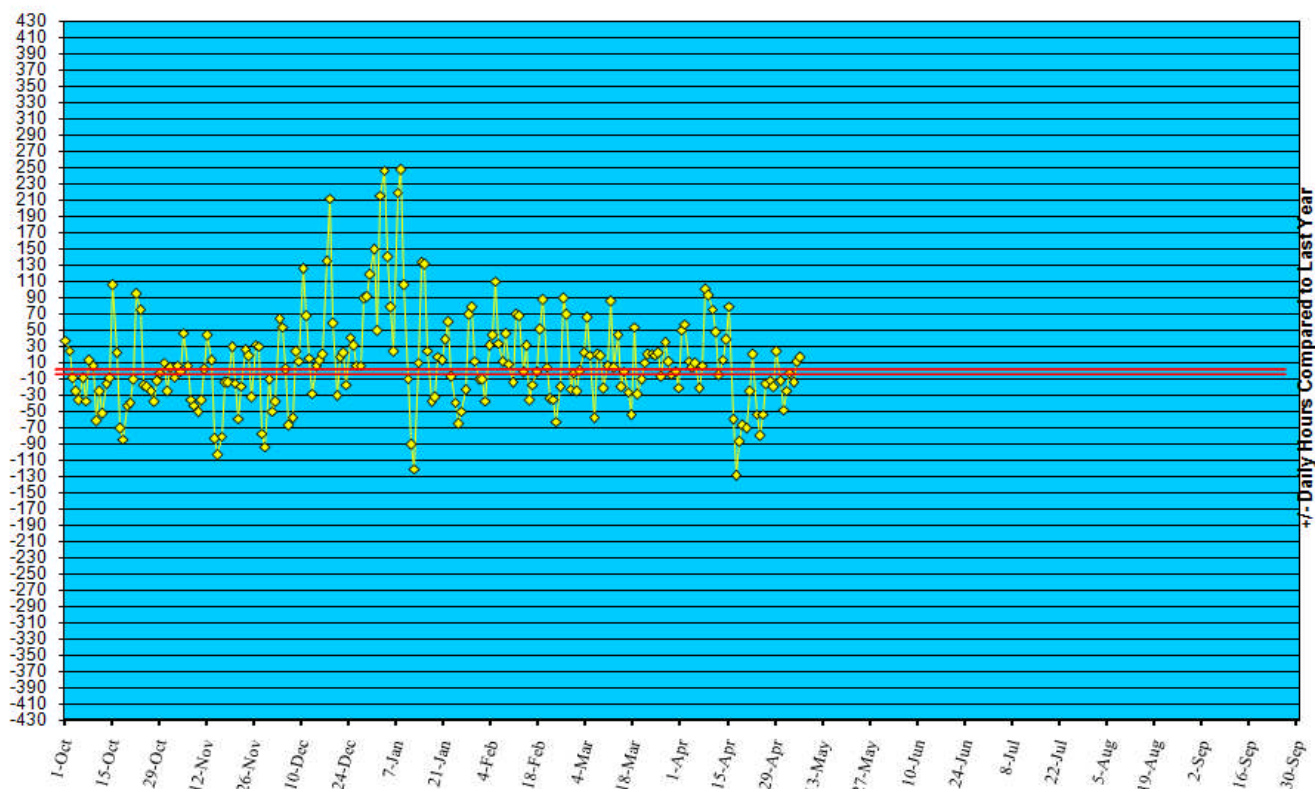


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '12 to May 4, '13



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in March 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:

New cases (April 28 – May 4, 2013):

Prior week (April 21 – April 27, 2013):

Week#18, 2012 (April 30 – May 6, 2012):

Aseptic

6

6

7

Meningococcal

0

0

0

4 outbreaks were reported to DHMH during MMWR Week 18 (April 28 – May 4, 2013)

3 Gastroenteritis Outbreaks

2 outbreaks of GASTROENTERITIS in Nursing Homes

1 outbreak of GASTROENTERITIS associated with an Animal Shelter

1 Foodborne Illness Outbreak

1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Greenhouse

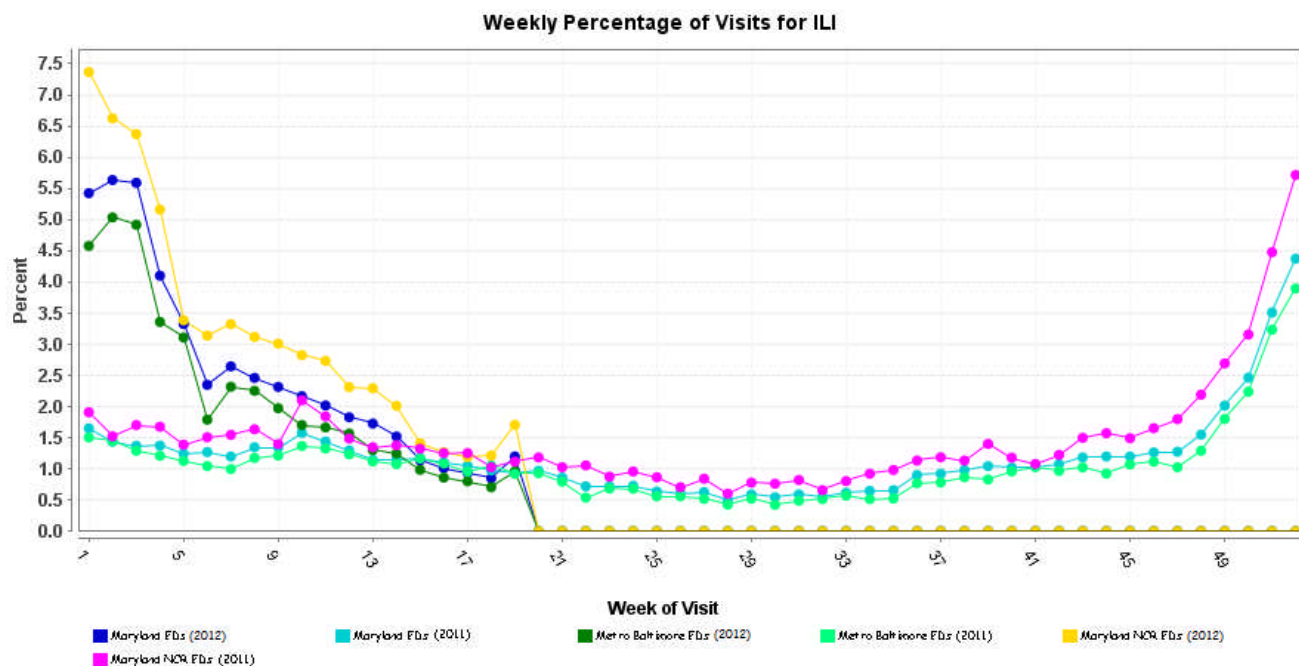
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 18 was: Sporadic Activity with Minimal Intensity.

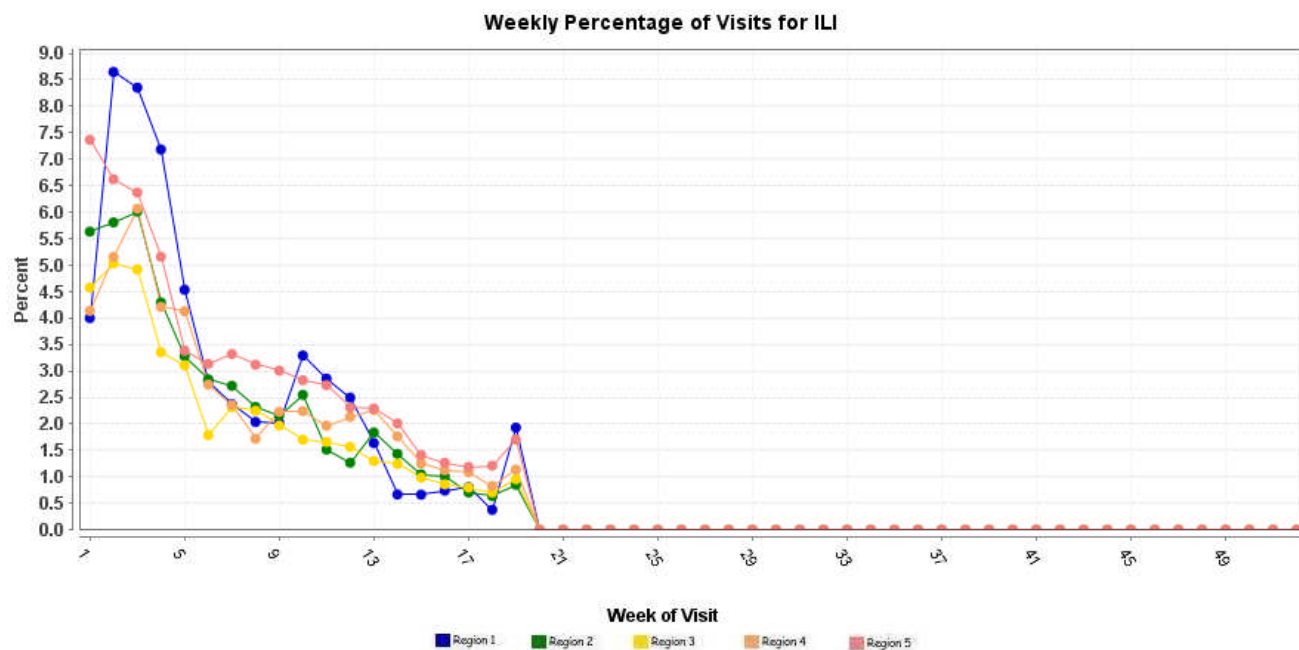
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.

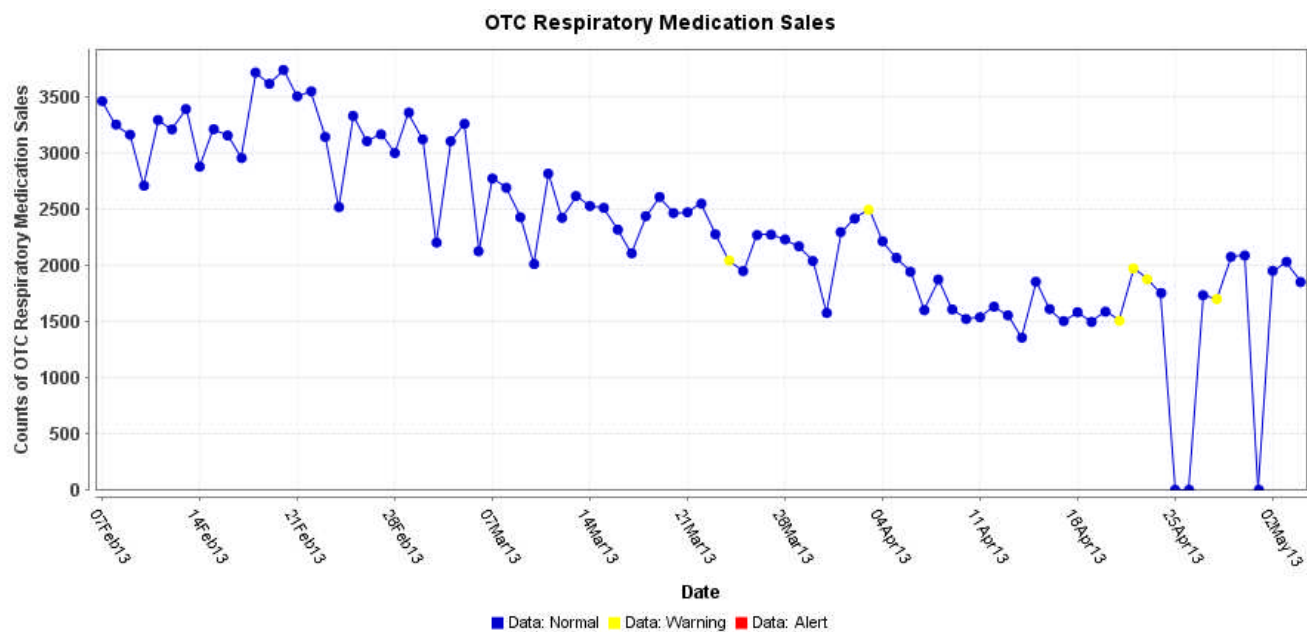


* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. As of March 12, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 622, of which 371 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 60%.

AVIAN INFLUENZA (CHINA): 1 May 2013, The new H7N9 avian flu virus has been detected in one more patient in China, a finding that brings the number of cases in the outbreak to 128, which includes 24 deaths. [Now 26 deaths according to WHO; see part [2] below]. The patient is a 69 year old man from Hunan province, located in south-central China, according to a statement today [1 May 2013] from Hong Kong's Centre for Health Protection (CHP). The man -- Hunan province's 2nd H7N9 case-patient -- is hospitalized in critical condition. The World Health Organization (WHO) yesterday [30 Apr 2013] updated its "frequently asked questions" background information on the H7N9 virus, which said that although evidence points to live poultry as the source of infections, investigations haven't confirmed that the birds are the primary or only source. Addressing the role of live-bird markets in the transmission of the virus, WHO said the markets should be periodically closed and emptied of all birds for regular cleaning. New birds brought into the market should be regularly sampled and tested to detect diseases early. WHO said regular maintenance of market environments can help minimize economic disruptions and the impact on a key source of protein for people. It also noted that the markets help ensure that the bird trade isn't diverted to channels of uncontrolled sales. Until more information is known about the infections, it's difficult to determine whether the H7N9 virus poses a significant risk of person-to-person spread in the community, WHO said. "This possibility is the subject of epidemiological investigations that are now taking place." It's not known yet whether H7N9 is a pandemic threat, the agency said. Animal viruses that infect people theoretically carry a pandemic risk, but some animal influenza viruses known to infect people haven't sparked pandemics. Regarding potential risks to health care workers, WHO said standard and extra precautions should be taken when caring for patients with suspected or confirmed H7N9 infections. In China and Taiwan, monitoring of close contacts of H7N9 patients turned up some instances of respiratory symptoms in health workers who cared for H7N9 patients, but so far, tests have not confirmed H7N9 flu in any worker. In other developments, a rush to publish scientific papers based on H7N9 genetic sequences that the Chinese National Influenza Center uploaded to the GISAID database early in the outbreak has sparked worries that China might not receive credit for its efforts to isolate and sequence the virus, according to a news report in Nature today [1 May 2013]. One of the points of conflict involves a genetic analysis and case study that Chinese scientists submitted to the New England Journal of Medicine on 5 Apr 2013. At about that time, the researchers learned that other groups were preparing papers or had already published studies on the sequences that Chinese researchers had uploaded to GISAID. At that time, the Chinese researchers also learned that pharmaceutical company Novartis and the J Craig Venter Institute had used the uploaded sequences to develop US-funded H7N9 vaccine without collaboration with the Chinese team, according to Nature. The Chinese researchers believed that the usage wasn't handled in the spirit of the GISAID database, which requires scientists who use the sequences to credit and propose collaboration with those who deposited the data. A spokeswoman from Novartis said the company explored research collaboration with China and is committed to sharing meaningful insights from the vaccine work with Chinese officials, Nature reported. Kristine Sheedy, PhD, associate director of communication science at the National Center for Immunization and Respiratory Diseases, with the US Centers for Disease Control and Prevention (CDC), told Nature that the CDC's use of the sequences isn't part of the misunderstanding. She added that the agency has had strong ongoing collaborations with China since the start of the outbreak.

NATIONAL DISEASE REPORTS*

SALMONELLOSIS (NEVADA): 2 May 2013, As many as 86 patrons and 3 workers may have contracted salmonellosis from a popular Las Vegas restaurant that shut down following a health inspection, according to the Southern Nevada Health Department (SNHD). Officials for the county's health authority spoke on Thu 2 May 2013 on details of the bacterial outbreak that forced the temporary closure of Firefly restaurant and its sister business Dragonfly restaurant on Paradise Road this week. In a news conference, SNHD officials said at least a dozen people were hospitalized due to the salmonella outbreak. They believed those who ate food from the restaurant on 21-25 Apr 2013 were affected. Three employees also were affected in the outbreak, officials said at the news conference. Health officials said they were looking at 10 menu items to see whether any of those were the cause of the outbreak. In an interim report by SNHD, inspectors found improperly stored food in inadequate temperatures, when it cited Firefly restaurant on 44 demerits. The eatery was also cited for employees handling food without gloves and preparing food next to cleaning chemicals. Dragonfly, which is located next to Firefly, was also cited for 47 demerits connected to its sister restaurant's inspection. The SNHD interim report also marked 30 demerits for the local restaurant chain's W. Sahara Avenue location and 6 for the S. Eastern Avenue location. The citations stemmed from a 29 Apr 2013 inspection, according to the report. "People have gotten sick here, and we're trying to get to the bottom of it and figure out what happened," said Firefly owner John Simmons. "It could come from an employee or person that currently has it that is working in the establishment and handling ready-to-eat foods without practicing good hygienic practices," said the SNHD's Amy Irani. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents)

*Non-suspect case

INTERNATIONAL DISEASE REPORTS*

Q FEVER (SPAIN): 30 April 2013, The Andalusia Department of Health confirmed an outbreak of Q fever in Villaverde del Rio [province of Seville, Autonomous Community of Andalusia] that affected 17 people. Q fever is a zoonosis transmitted to humans through the air, never from person to person, by inhalation of these organisms from air contaminated mostly by excreta [of infected animals]. The disease, with an incubation period of 10 to 40 days, produces high fevers and headaches, can affect organs such as the liver and, in severe cases, lead to pneumonia, but it has a low mortality and can be treated with antibiotics. In Villaverde, the rumors that resulted from lack of information have it that more than 100 people are affected; however, the health department gives assurances that only 17 have been affected by the disease, and the clinical evolution of all of them has been favorable. Moreover, the Junta [government] says that the incubation phase has passed, and currently there are no confirmed cases. The origin of the fever was located in a cabin of goats, which was isolated. However, other sources indicate that at least 3 people with very similar symptoms have been admitted in

the Virgen Macarena Hospital, but the diagnosis of Q fever is not as yet confirmed. Among them is a 44 year old man, a barber by trade, who as of yesterday [29 Apr 2013] remained in the ICU. Magdalena Martin, PP [Popular Party] spokesperson in the Municipality of Villaverde, asked that the local authorities and the Junta release the necessary information to reassure the residents. (Q Fever is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

FOODBORNE ILLNESS (EGYPT): 30 April 2013, Egypt's Ministry of Health said on Tue 30 Apr 2013 that the total number of food poisoned students has reached 161 [at Al-Azhar, Cairo's centuries old seat of Sunni learning]. Preliminary investigations indicate that "bad tuna" served at the campus cafeteria is behind the events. There are no deaths reported so far, the ministry reaffirmed. Food poisoning hit Egypt's top Islamic university on Mon 29 Apr 2013 evening, less than a month after a mass poisoning incident at the same university left more than 500 students hospitalized. Top Azhar cleric Ahmed al-Tayeb has formed a committee to investigate the incident. Egyptian prime minister Hisham Kandil said in a statement that he asked the health minister to visit the hospitalized students and asked the interior minister to begin an investigation immediately. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

LISTERIOSIS (CHILE): 29 April 2013, Rosa Oyarce, the metropolitan health SEREMI [las Secretarias Regionales Ministeriales de Salud; regional governmental ministerial unit], confirmed that the listeriosis outbreak affecting the country in recent months comes from a batch of camembert soft cheese of the Santa Rosa brand, which is already being recalled nationwide. The batch number is 073 210, with an expiration date of 23 May 2013, and consists of 2000 units that were distributed mostly in Santiago and in the Bio Bio Region, where listeriosis patients were also registered. According to the SEREMI, once the alert was raised due to the increased number of cases, [health authorities] began an investigation of the products that might be contaminated with the bacterium *Listeria monocytogenes*, including raw food and unpasteurized milk, as well as dairy products such as soft cheeses. Through these tests, the contaminated food was detected. Oyarce clarified that only "certain items (those with the bacteria) and not the whole production (of cheese) were affected. A single batch was contaminated." The products are already being recalled to prevent further infections. Jorge Diaz, assistant health secretary, reported that until last week [week of 22 Apr 2013], 34 cases had been registered in the country including 5 deaths. Santiago is the most affected, with 18 cases and 4 deaths. The SEREMI reiterated the call for people to pay attention to hygiene measures when handling food, especially vulnerable groups, such as pregnant women and the elderly and chronically ill, who are more susceptible to [infection] with the bacteria. "People who are not at risk will most likely not have many problems apart from general malaise, but for people at higher risk, we maintain the preventive message to avoid eating raw foods or foods such as these (soft cheeses), because the risk is higher for them," she said. Among the products that as a general rule could be contaminated are unpasteurized milk and its byproducts, raw meat, fish, and seafood, as well as cold cuts and sausages, and fruit and vegetables that have contacted the soil, as the bacterium is typically found in soil and water. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CRIMEAN-CONGO HEMORRHAGIC FEVER (TURKEY): 29 April 2013, A man died as a result of Crimean-Congo hemorrhagic fever (CCHF), a sometimes fatal viral disease contracted from a tick bite, in the Black Sea province of Tokat on Sat 27 Apr 2013. He had been bitten by a tick while taking care of his animals in the fields on 17 Apr 2013. He extracted the tick by himself and did not immediately seek professional attention. He was taken to Tokat State Hospital and later transferred to the Gaziosmanpasa University Research and Treatment Hospital when his condition deteriorated. Doctors at the Gaziosmanpasa hospital stated that the man is the 1st person to die due to CCHF this year [2013] in Turkey; however, some patients are currently receiving treatment for the disease in other hospitals. According to data released by the Ministry of Health, 174 people died as a result of CCHF in Turkey between 2002 and 2012. The number of tick bite cases increases as the weather gets warmer and people engage in more activities outdoors. Experts say people who come into contact with a tick should be carefully monitored for 10 days following contact and seek professional medical care if symptoms of fever, headache, nausea, vomiting, or diarrhea present themselves. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from <http://www.promedmail.org/>.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmm.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	<p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p>	<p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p>
Neurological	<p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p>	Not applicable
Rash	<p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p>	Smallpox
Specific Infection	<p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p>	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	<p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p>	Not applicable
Severe Illness or Death potentially due to infectious disease	<p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p>	Not applicable

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CENTERS FOR DISEASE CONTROL AND PREVENTION**

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